

APPENDIX A - Table "Exemplary Canonical UI Input Constructs"

Construct	Mandatory parameters (except when disabled)	OPTIONAL PARAMETERS	RE-TURN	DESCRIPTION	IMPLEMENTATION EXAMPLES
<select_one > </select_one >	<ul style="list-style-type: none"> - <name> <i>name</i> </name> - <prompt> <i>p</i> </prompt> - <option> <i>a</i>₁ </option> - <option> <i>a</i>₂ </option> ... - <option> <i>a</i>_{<i>n</i>} </option> 	<ul style="list-style-type: none"> - <disabled/> - <disabled_option/> - <default_option/> - <per_option_prompt> <i>pop</i> </per_option_prompt> - <type> <i>t</i> </type> 	<i>a</i>	Parameter type for choosing one element <i>a</i> from a set <i>A</i>	<ul style="list-style-type: none"> - Menu - Group of radio buttons - Non-editable combo box
<select_subset> </select_subset>	<ul style="list-style-type: none"> <name> <i>name</i> </name> <prompt> <i>p</i> </prompt> <option> <i>a</i>₁ </option> <option> <i>a</i>₂ </option> ... <option> <i>a</i>_{<i>n</i>} </option> 	<ul style="list-style-type: none"> - <disabled/> - <disabled_option/> - <default_option/> - <per_option_prompt> <i>pop</i> </per_option_prompt> - <type> <i>t</i> </type> 	<i>A'</i>	Parameter type for selecting a subset <i>A'</i> from a set <i>A</i>	<ul style="list-style-type: none"> - Listbox - Group of checkboxes
<Boolean_choice> </Boolean_choice>	<ul style="list-style-type: none"> <name> <i>name</i> </name> <prompt> <i>p</i> </prompt> 	<ul style="list-style-type: none"> - <disabled/> - <default_FALSE/> - <default_TRUE/> 	<i>b</i>	Parameter type for selecting True/False [or Off/On, OK/Cancel, etc.]	<ul style="list-style-type: none"> - Single checkbox
<select_integer> </select_integer>	<ul style="list-style-type: none"> <name> <i>name</i> </name> <prompt> <i>p</i> </prompt> <min> <i>n</i>₁ </min> <max> <i>n</i>₂ </max> 	<ul style="list-style-type: none"> - <disabled_control_element/> - <default_value> </default_value> - <incr> <i>δ</i> </incr> 	<i>n</i>	Parameter type for selecting an integer <i>n</i> in the range <i>n</i> ₁	<ul style="list-style-type: none"> - Trackbar - Spinner

Construct	Mandatory parameters (except when disabled)	OPTIONAL PARAMETERS	RE-TURN	DESCRIPTION	IMPLEMENTATION EXAMPLES
<code><select_real></code> <code></select_real></code>	<code><name> name</code> <code></name></code> <code><prompt> p </prompt></code> <code><min> x_1 </min></code> <code><max> x_2 </max></code> <code><incr> δ </incr></code>	- <code><disabled/></code> - <code><default_value> ..</code> - <code></default_value></code>	x	through n_2 , increment δ Parameter type for selecting a real number x in the range x_1 through x_2 , increment δ	- Slider - Dial
<code><enter_string></code> <code></enter_string></code>	<code><name> name</code> <code></name></code> <code><prompt> p </prompt></code>	- <code><suggest> s_1 </suggest></code> - <code><suggest> s_2 </suggest></code> - <code><suggest> s_n </suggest></code> - <code><disabled/></code> - <code><default></code> - <code><max_length> m </max_length></code>	s	Parameter type for an arbitrary string s ; possibly from suggestion set S .	- Edit Box - Combo Box
<code><modify></code> <code></modify></code>	<code><name> name</code> <code></name></code> <code><prompt> p </prompt></code> <code><unmodified_string> s</code> <code></unmodified_string></code>		s'	Parameter type for the modification of a given string s , resulting in string s'	- Initialized edit box

Construct	Mandatory parameters (except when disabled)	OPTIONAL PARAMETERS	RE-TURN	DESCRIPTION	IMPLEMENTATION EXAMPLES
<code><order></code> <code></order></code>	<code><name> name</code> <code></name></code> <code><prompt> p </prompt></code> <code><element> a₁</element></code> <code><element> a₂</element></code> <code>...</code> <code><element> a_n</element></code>			Parameter type for ordering the elements of set <i>A</i> into <i>A'</i>	- directory, file search order control (examples in IIS and Visual Studio)
<code><associate></code> <code></associate></code>	<code><name> name</code> <code></name></code> <code><prompt> p </prompt></code> <code><elem1> a₁/elem1></code> <code><elem1> a₂/elem1></code> <code>...</code> <code><elem1> a_n/elem1></code> <code><elem2> b₁/elem2></code> <code><elem2> b₂/elem2></code> <code>...</code> <code><elem2> b_m/elem2></code>		zero or more ordered pairs (<i>a</i> , <i>b</i>)	Parameter type for pairing set <i>A</i> elements with set <i>B</i> elements	- Example: Mapping table columns in SQL Server DTS

Construct	Mandatory parameters (except when disabled)	OPTIONAL PARAMETERS	RE-TURN	DESCRIPTION	IMPLEMENTATION EXAMPLES
<group> </group>	<name> group_name </name> <description> <i>d</i> </description>	- <group> ... </group> - <command> ... </command>		Contains commands and subgroups	- Dialog box
<command> </command>	<name> <i>name</i> </name> <prompt> <i>p</i> </prompt> <action> <i>a</i> ₁ </action> <action> <i>a</i> ₂ </action> ... <action> <i>a</i> _{<i>n</i>} </action>	- <disabled/> - constructs such as select_one that describe action call parameters	Contains action calls and parameters	Specifies the actions to send to the controlled device that will carry out the command. Includes description of the parameters needed for each action.	- Pushbutton - Hotkey - Hardware key

APPENDIX B - Table "Exemplary Canonical UI Output Constructs"

Construct	Mandatory parameters (except when disabled)	OPTIONAL PARAMETERS	DESCRIPTION	IMPLEMENTATION EXAMPLES
$\langle \text{matrix title} = t \text{ columns} = n \rangle$ $\langle \text{matrix} \rangle$	<ul style="list-style-type: none"> - $\langle \text{ColumnHeaders} \rangle$ - $\langle \text{ColumnHeader} \rangle h_1 \langle \text{ColumnHeader} \rangle$ - $\langle \text{ColumnHeader} \rangle h_2 \langle \text{ColumnHeader} \rangle$ - ... - $\langle \text{ColumnHeader} \rangle h_n \langle \text{ColumnHeader} \rangle$ - $\langle \text{ColumnHeaders} \rangle$ - $\langle \text{Row} \rangle$ - $\langle \text{Label} \rangle l \langle \text{Label} \rangle$ - $\langle \text{Number} \rangle n \langle \text{Number} \rangle$ - $\langle \text{String} \rangle s \langle \text{String} \rangle$ - $\langle \text{Row} \rangle$ 	$\langle \text{EmptyElement} \rangle$ $\langle \text{EmptyRow} \rangle$	<p>Allow matrix to be traversed via row or column in different directions. Allow skip to next or previous sparse element.</p>	<ul style="list-style-type: none"> - table
$\langle \text{notification} \rangle_n \langle \text{notification} \rangle$			<p>Display a message</p>	<ul style="list-style-type: none"> - message box